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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,391	02/24/2004	Raymond Bass	INDUCTION2-CONT	6526
2574	7590	01/10/2006	EXAMINER	
JENNER & BLOCK, LLP			LEUNG, PHILIP H	
ONE IBM PLAZA			ART UNIT	
CHICAGO, IL 60611			PAPER NUMBER	

3742

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/785,391	Applicant(s) BASS, RAYMOND	
	Examiner Philip H. Leung	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-10 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 5-10 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Lingnau (US 5,660,753), in view of Loveless et al (US 5,837,976) (all previously cited).

Lingnau discloses the claimed invention of an induction heating stripping device for removing coating bonded to a metal surface including electrical leads 22 and stripping head 20. It does not explicitly show the circuit of the power supply with the use of capacitors (see Figures 1, 2 and 4 and col. 2, line 38 - col. 5, line 45). However, Loveless shows that it is well known in the art of induction heating devices that it is essential to use capacitors to form a resonance circuit with the heating inductor to induce current to the work load to provide induction heating. It shows the use of a capacitor 92, 94 between each lead to the power supply 86 and each lead to the inductor 96 forming series resonant circuits. The capacitors 92 and 94 are clearly spaced from the inverter 86 by the transformer 88 and the lead wires and definitely the commercial power source (see Figures 4B, 5 and 8 and col. 4, line 66 – col. 5, line 65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lingnau to include capacitors in order to form a series resonant tank circuit with the heating inductor to produce induction heating at resonance for better heating efficiency and result, in view of the teaching of Loveless. In regard to claims 6-10, the exact power, frequency

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and the length of the cable would have been a matter of engineering expediency depending on the overall load characteristics and the available cost.

3. Applicant's arguments filed 10-26-2005 have been fully considered but they are not persuasive. The argument that Loveless (US 5,837,976) does not show that the capacitors are "spaced from said power supply" as now claimed is not well taken. At the outset, all that being claimed as the power supply is "an electrical power supply" that may be merely the commercial power source which of course, spaced from all the electrical devices. Secondly, even if the capacitors 92, 94 and the voltage inverter 86 as shown in Figure 4b are in a single housing, they are still spaced and separated from each other by the transformer 88 and the wires. Most importantly, it is seen as a matter of engineering expediency to determine the relative location of the electrical elements between the power supply and the other electrical elements depending on the types of heating application. Applicant has not provided any criticality for the spacing.

It is noted that the amendment to claim 8 has removed the issue noted in paragraph 3 of the previous Office action. However, it is respectfully suggested to also delete "at least" from claims 9 and 10 so that the limitations in these claims are consistent with the description on page 11 of the specification.

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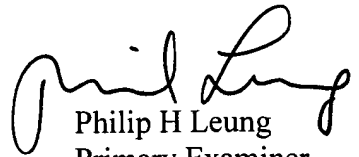
4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip H Leung whose telephone number is (571) 272-4782. The examiner can normally be reached on flexible.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Philip H Leung
Primary Examiner
Art Unit 3742

P.Leung/pl
1-6-2006